SURFACE WATER SOURCE

Plant Name:_____   **EP #:** _____

(Please note: all violations listed below include paragraph numbers from §290 of the Rules and Regulations for PWSs.)

A. RAW WATER SOURCE AND INTAKE

TNRCC Intake ID#(s)_____

		Y	N			Y	N
Liquid/solid wastes on watershed controlled?	**[.41(e)(1)(B)]**	_	_	Adequate intake screens or grates?	**[.41(e)(2)(F)]**	_	_
If yes, by whom?_____				Boat ramps, marinas, piers > 1000'?	**[.41(e)(2)(B)]**	_	_
Variable level intake or acceptable fixed level?	**[.41(e)(2)(E)]**	_	_	200' restricted zone marked and reg.s est.?	**[.41(e)(2)(C)]**	_	_

B. GENERAL

		Y	N			Y	N
Pumps and treatment facilities not subject to flooding?	**[.41(e)(3)]**	_	_	No cross-connections or common partition walls?	**[.42(d)(2)]**	_	_
Proper distance from wastewater facilities?	**[.41(e)(3)(A)]**	_	_	Vacuum breakers on all hose bibs?	**[.42(d)(2)(A)]**	_	_
Intruder resistant fencing?	**[.41(e)(3)(C)]**	_	_	Proper drainage, decant return and discharge?	**[.42(d)(3)]**	_	_
All weather road to treatment plant and intake?	**[.41(e)(3)(D)]**	_	_	Adequately equipped lab. and sample taps?	**[.42(d)(13)]**	_	_
Raw and treated water flow meters?	**[.42(d)(5)]**	_	_	Calibration of lab. equip. observed & adeq.?	**[290.119]**	_	_
Complete treatment and required log reductions?	**[.42(d)(1)]**	_	_	Continuous water quality monitoring?	**[.46(e)(2)]**	_	_
Plant Operations Manual?	**[.42(j)]**	_	_				

CONTROL TESTS:	pH	Alkalinity (mg/l)	Turbidity (NTU)	Cl$_2$ (T or F, mg/l)	Other
Field Results:					
System Results:					

C. CHEMICAL FEED FACILITIES   Liquid _____ Dry _____

		Y	N			Y	N
Standby chemical feeders of each type/use?	**[.42(d)(7)(A)]**	_	_	Complete mixing and coagulant feed continuous?	**[.42(d)(7)(F)]**	_	_
Accurate chemical metering and flow adjustment?	**[.42(d)(7)(B)]**	_	_	Backflow prevention on make-up water lines?	**[.42(d)(2)(C)]**	_	_
Separate dry chemical feed room with dust control?	**[.42(d)(7)(C)]**	_	_	Sufficient chemical application points?	**[.42(d)(7)(H)]**	_	_
Day tanks provided if necessary?	**[.42(d)(6)(D)]**	_	_	Proper dry/liquid chemical storage?	**[.42(d)(6)(C)]**	_	_
Open channels or non-clogging feed lines?	**[.42(d)(7)(E)]**	_	_				

D. SEDIMENTATION   Solids Contact _____ Straight-Flow _____

		Y	N			Y	N
Adequate flash mixing and flocculation equipment?	**[.42(d)(8)]**	_	_	Acceptable sludge removal and depth measurement?	**[.42(d)(9)(A)]**	_	_
Settled water turbidity < 5 NTU?	**[.42(d)(8)(B)]**	_	_	Short circuiting and floc destruction prevented?	**[.42(d)(9)(B)]**	_	_
For flow > 3MGD, parallel mix. and floc. units?	**[.42(d)(8)(C)]**	_	_	For flow > 3 MGD, parallel clarification units?	**[.42(d)(9)(E)]**	_	_

E. FILTRATION   Gravity _____ Pressure _____   Media Type _____ Media Depth _____

		Y	N			Y	N
Acceptable filter rate and flow limiting devices?	**[.42(d)(10)]**	_	_	Loss of head indicators?	**[.42(d)(10)(C)(v)]**	_	_
Duplicate capacity for pressure filters?	**[.42(d)(10)(C)(iii)]**	_	_	Filter-to-waste connections air gapped?	**[.42(d)(2)(E)]**	_	_
No pressure filters for plants ≥ 0.50 MGD	**[.42(d)(10)(C)]**	_	_	Filters and other treatment units separated?	**[.42(d)(2)(D)]**	_	_
Proper type and depth of media?	**[.42(d)(10)(A)]**	_	_	Adeq. room, light, vent. & drain. in pipe gallery?	**[.42(d)(11)]**	_	_
Proper backwash design and flow rate?	**[.42(d)(10)(D)]**	_	_	Proper piping identification?	**[.42(d)(12)]**	_	_
Surface wash vacuum breaker properly installed?	**[.42(d)(10)(D)(iv)]**	_	_	Annual interior inspection of pressure filters?	**[.46(p)(3)]**	_	_
Rate of flow controllers?	**[.42(d)(10)(C)(iv)]**	_	_	Filters properly backwashed?	**[.46(q)]**	_	_
Filter Sampling Taps?	**[.42(d)(10)(C)(vii)]**	_	_				

F. DISINFECTION

		Y	N			Y	N
Adequate disinfectant residual in clearwell?	**[.42(e)(1)]**	_	_	Standby disinfection unit of each capacity?	**[.42(e)(4)(C)]**	_	_
Pre and post disinfection available?	**[.42(e)(4)(F)]**	_	_				

I.D. No. _____

Plant Name: _____

Source I.D.: _____

TREATMENT PLANT CAPACITY EVALUATION

Total Number of Conn. Served: _____
System Maximum Daily Demand (MDD): _____
{A}
Min. Req'd Cap.: 0.6 GPM/Conn. X _____ Conn. = _____ GPM
= _____ MGD
{B}

Raw Water Pump Capacity
Number and Sizes: _____
Total Capacity: _____ GPM = _____ MGD
{C}
Cap. w/o largest unit: _____ GPM = _____ MGD
{D}
                                                                       Y N
Adeq. Raw Water Pump Cap.? (Is {D} $\geq$ {B}?) [.45(b)(2)(A) & (c)(2)(A)]... _ _

Sedimentation Basin Capacity Solids Contact _____ Straight-Flow _____
Number and Dimensions: _____
Total Volume: _____ Gal.
Req'd Detention Time (min.): 120, 270, 360 or Other _____ (Note: Circle One)
Max. Cap.: _____ Gal. / _____ min. = _____ GPM
= _____ MGD
{E}

Transfer Pump Capacity
Number and Sizes: _____
Total Capacity: _____ GPM = _____ MGD
{F}
Cap. w/o largest unit: _____ GPM = _____ MGD
{G}
Adeq. Transfer Pump Cap.? (Is {G} $\geq$ {B}?)[.45(b)(2)(C) & (c)(2)(C)]... _ _

Filter Capacity Pressure _____ Gravity _____
Number and Dimensions: _____
Total Area: _____ ft^2
Media Type: Sand, Dual, Mixed or Other _____ (Note: Circle One)
Maximum Filter Rate (GPM/ft^2): 2, 5 or Other _____ (Note: Circle One)
Max. Capacity: _____ ft^2 X _____ GPM/ft^2 = _____ GPM
= _____ MGD
{H}

Miscellaneous (Other Capacity Restrictions)
Description: _____
Max. Capacity: _____ GPM = _____ MGD
{I}

Treatment Plant Capacity
Normal Rated Design Flow: _____ MGD
 (Note: Smaller of {C}, {E}, {F}, {H} or {I} above)   {J}
Limiting Component?: _____
Treatment Plant Cap. Exceeds Min. Req'd Cap.? (Is {J} $\geq$ {B}?)[.45(b)(2)(B) & (c)(2)(B)]....................... _ _

Treatment Plant Cap. Exceeds MDD? (Is {J} > {A}?)[.42(a)].. _ _

Clearwell Capacity
Total Volume: _____ Gal. = _____ MG
{K}
0.05 X _____ MG = _____ MG
 (5%) (Normal Rated Design Flow, {J} above)   {L}
 (Note: Min. Clearwell Cap. for Transient NC System is 1000 Gal.)
Adequate Clearwell Capacity? (Is {K} $\geq$ {L}?)[.45(b)(2)(D)]... _ _